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ABSTRACT

Intended to introduce educators in secondary schools and colleges to discussion promoting economic literacy for all students, this paper offers a critique of the typical economics curriculum, a rationale for economics education, and a working definition of economic literacy. The first section reviews and critiques current curriculum planning in the United Kingdom's secondary schools, questioning the basis on which some writers have justified the inclusion of economics in the curriculum. In the second section, it is argued that inclusion of economics understanding in "core" curriculum would be too overwhelming, based on the rationale that it is only through an economics perspective that students can achieve sufficient objectivity to ensure realistic scrutiny and evaluation of economic issues, problem experiences, and policies that confront individuals and nations. The third section translates themes from this argument into a working definition of economic literacy. Appendices containing examples of economics reasoning conclude the publication. (LH)

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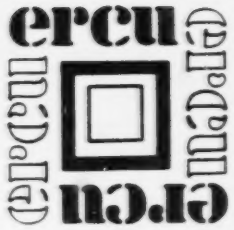

Curriculum Paper

Economics in the General Curriculum 14-18

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ECONOMICS IN THE GENERAL CURRICULUM 14-18

INTRODUCTION

This paper is intended as a contribution to the discussions and writings concerning the introduction into schools/colleges of programmes designed to promote economic literacy in all students. The first section questions the basis on which some writers have justified the inclusion of aspects of economics understanding in the curriculum. In the second section the authors argue that the case for economic literacy programmes is overwhelming, but that it is derived from the nature of the economic system itself and from the unique contribution which an insight into economics makes to the education of young people. A third section attempts to translate the argument into a working definition of economic literacy. Illustrations of economic reasoning are provided in an appendix.

CONTEXT

The typical school curriculum has been subject to close, critical scrutiny during the last few years. Many evaluators are less than sanguine about its effectiveness.

HMI in the DES (1977) report Curriculum 11-16 were critical of the lack of curriculum planning in most secondary schools. In particular they condemned schools' reliance on examinations based 'options' systems to produce a balanced general curriculum for young people. They offered an alternative structure for planning, based on areas of experience rather than subjects. Lawton (1984) endorses HMI criticisms, suggesting that

> the typical curriculum is not rationally planned from first principles but is taken over as part of a tradition with a few minor adjustments from year to year (p.3).

However, whilst agreeing that the work of HMI marks a real advance in curriculum planning, he is less than satisfied with the arbitrary way in which the eight areas of experience suggested by HMI are selected. His own approach is derived from an analysis of culture and a value position which sees the mediation of culture as the major task of the school. He subdivides culture into a set of cultural systems - socio-political, economic, communication, rationality, morality, belief, aesthetic - and suggests that these comprise the minimum cultural requirement in any society. On this basis he argues that

> a balanced and coherent curriculum will be one which selects appropriately from all the systems (p.6).

Lawton's thesis could, therefore, be seen as providing the theoretical basis for the increase in public interest in the provision of some aspects of economic understanding in the curriculum.

The Green Paper, Education in Schools: A Consultative Document (1977), for example, lists as one of the eight major curricular aims:

> to help children to appreciate how a nation earns and maintains its standard of living, and properly to estimate the essential role of industry and commerce in this process (para 1.15).

This position is justified by pointing out that

> only a minority of schools convey adequately to their pupils the fact that ours is an industrial society in a mixed economy (para 1.12).

The DES (1977) document Curriculum 11-16, prepared by HM Inspectorate's Curriculum Review Group, states that

> Given the nature of the industrial society in which we must live, no one questions the crucial importance of 'economic competence' for all citizens. This competence should be enjoyed, as far as is realistically possible, by every sixteen year old (p.53).

The DES (1980) publication A Framework for the School Curriculum also points out that

> Schools contribute to the preparation of young people for all aspects of adult life ... substantial attention should be given at the secondary stage to the relationship between school work and preparation for working life. Pupils need to acquire an understanding of the economics basis of society and how wealth is created (paras 32 and 33).

Schools Council (1981) includes as one of its six general recommendations in The Practical Curriculum that schools should help pupils

> to acquire understanding of the social, economic and political order (p.15).

More recently the DES (1982) document 17+: A New Qualification states that the common activities which should occupy students for 60% of their time must include studies designed to give a broad understanding of the way in which the country earns its living. And the concern recently expressed by Sir Keith Joseph, Secretary of State for Education and Science, that pupils should 'acquire knowledge of the economic foundations of society' and be made aware of 'the economic facts of life' is but the latest example of this public concern.

Lawton's submission is a persuasive one since it provides justification for some study of the economic system. And yet, it is hard to be entirely convinced by an argument which seems to suggest that the mere existence of a phenomenon is sufficient reason for its inclusion in the curriculum. Similarly, the kind of argument deployed by Schools Council (1979), which draws attention to the fact that

> changing social, economic, technological and leisure patterns should be reflected in the school curriculum ... to provide in young people the range of capabilities they need in their adult working and social lives (pp.4 and 5)

does not, in itself, constitute a sufficient rationale although the changes identified may expose more clearly the deficiencies in the school curriculum.

THE ECONOMIC SYSTEM AND THE ROLE OF ECONOMICS

Like Lawton, HMI and others we believe the case for the inclusion of some aspects of economic understanding in the 'core' curriculum of schools to be overwhelming. However, the grounds on which our conclusion is based are derived from a rather different perspective - from the nature of the economic system itself and its influence on individuals and on groups in our nation.

The economic system is the medium whereby scarce resources are transformed into things which meet the country's needs. It is a decisive element in the social, cultural and political framework of the nation which is embodied in institutions, mechanisms, techniques and conventions and finds expression in constraints, policies, habits, motivations and values. Ultimately its existence depends upon the presence of scarcity and the resulting need to mitigate the effects of the constraints scarcity imposes on individual choice. Paradoxically, the economic system itself creates further constraints on choice. For example, it is possible to perceive the difference between the two photographs (below) as a representation of the effect of scarcity. Alternatively it is possible to argue that they give the lie to the notion of 'pure' scarcity and confront us with the realities of economic life and the power possessed by the economic system both to constrain and influence behaviour.

Source: Economics Education 14-16 Project. Unit: Consumers

Moreover, in extreme cases the economic system not only constrains, it exploits. For example, notions of what are fair wages represent value positions and if these value positions find expression through the economic system they may effectively lead to the exploitation of certain sectors of society.

The 'economic facts of life' seem therefore to be uncomplicated

* the economic system exerts an influence on individual behaviour
* individuals play a part in and make a contribution to the economic system
* the economic system is neither static nor sacrosanct
* individual and group behaviour can have an important effect on the development of the economic system

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In our view only those who grasp these economic facts - the meaning of the part they play in the system, the nature of their individual contribution and its effect upon the system - can be expected to cope constructively with its power and influence. If this is so, our students are entitled to expect their educational system to provide them with the means to attain that position. Economics education has a crucial role to play in this process, since it is only through an economics perspective that students can achieve sufficient objectivity to ensure a realistic scrutiny and evaluation of the economic issues and problems, experiences and policies, that confront individuals and nations.

Economists are concerned to explain how the economic system works, but the power of economics' contribution to the general education of young people lies not in the economists' search for greater accuracy and precision, but in the provision of a theoretical framework which they can use to organise information and reflect on experience, and which ultimately gives access to the economics perspective. It is possible both to <u>comprehend</u> statements made by industrialists, union leaders, politicians and newspaper journalists without an economics perspective and to <u>describe</u> the choices made by individuals and corporations. An economics perspective however, provides the means to <u>analyse</u> and <u>evaluate</u> them, to distinguish between facts and values and to recognize the use of economic power.

TOWARDS A WORKING DEFINITION OF ECONOMIC LITERACY

We have argued that young people have a right of access to the means for objective analysis, an economics perspective, and with it, the foundation for developing a critical awareness of the way the economic system works. We have also argued that access to the economics perspective - the means for objective analysis of particular situations, experiences and economic policies which involve a choice in the use of scarce resources - is derived from the use of a general theoretical framework to organise information and reflect on experience. In other words, the economics perspective originates in the theory that:

> choice behaviour is constrained by scarcity and the influence of the economic system. The opportunity costs for the individual and the real costs to society of any choice behaviour involving the use of scarce resources at the margin are not reflected by prices or money costs.

This statement defines the theoretical framework of economics. It may be represented, in operational form, as a procedural framework which exemplifies the application of the general concepts of opportunity cost, marginality and efficiency to analyses of particular situations and which allows the theoretical framework to operate as a means of organising information and reflecting on experience. This procedural framework takes the following form:

* Examine any marginal decision involving the use of scarce resources. Deduce whether the decision indicates that marginal benefits are greater than or equal to prices or money costs.

* Does it represent the best use of scarce resources? What does best mean?

* Are any costs other than money involved? Analyse the question in opportunity cost terms: 1. What returns are available from alternative uses of the resource? 2. What other resource use is involved as a result of the decision? 3. Are external/social costs present?

* Re-examine the choice behaviour. Consider benefits at the margin in relation to costs at the margin noting the effect of value judgements.

* Does it represent the best use of scarce resources? What does best mean?

* Consider policy implications.

* Alternatively, start with a policy or advisory statement and work backwards, exposing the value judgements involved.

This procedural framework is recognisable in any valid piece of economic reasoning at any level and, because it provides access to an economics perspective, forms the basis for developing a critical awareness of the way the economic system works (see appendix for examples).

Economic literacy programmes in the 14-18 curriculum should be clearly identified with such a procedural framework, for it permits students to consider experiences and/or problems involving a choice in the use of resources in the real world in a particular and aware way. Some programmes of activities which require students to handle information, to coordinate data, to group phenomena, to list functions, to manipulate economic variables, to explore relationships and links which may be perceived within the economic environment and to construct models and theories, may appear to be contributing to the development of a framework of theory in the form of concepts, information and skills, but in reality they consist of little more than the descriptive processes of information gathering, labelling and the development of non-transferable skills. The two outcomes differ radically. The one consists of data amassing, whilst the other aims at sharpening discernment. Economic literacy programmes which are geared to facilitate access to an economics perspective rather than to transmit a received view of the economic system allow the necessary procedures to be appropriated by constant use . This process encourages the development of the intellectual, procedural and practical skills which are necessary to handle information, coordinate data, explore relationships, form concepts etc. These skills include the ability to

* identify the economic aspects of particular issues and correctly to apply relevant economic ideas and principles

* organise and present economic ideas in an accurate, reasoned and relevant way

* process data, to translate it from one form to another and to use it to support arguments and points of view.

Individuals who are economically literate are able to use these skills within the procedural framework of economics to comprehend in their own terms the concepts (eg. scarcity and choice, supply, demand etc.) used by economists to define those relationships in the economic system which are of interest to them (eg. the differences between income, value added and wealth, the effects of government, the links between money incomes, changing prices and living standards, the relationship of the parts to the whole, the consequence of changing technology for firms, industries and employment etc.). They are also able to use these skills to generate an objective and dynamic base of information concerning the meaning of terms in common usage in economics (eg. production, balance of payments, exports, credit, income, savings etc.), the functions and characteristics of institutions (eg. trade unions, banks, local authorities etc.) and of particular aspects of the economic system which bear on our lives as consumers, producers and citizens (eg. how prices are arrived at, how wages and other factor prices are determined, the role of money etc.). Thus, individuals who are economically literate are empowered to act confidently in the complex modern world not only as informed but also as competent consumers, producers and citizens.

CONCLUSION

In our view then, all young people are entitled to the knowledge, information and skills which will enable them to understand the salient features of the economic environment in which they live, that is to be economically literate. The task of the education system is to make that knowledge and know-how accessible in a coherent form. In questioning the assumptions made by others who hold similar views and in attempting to work towards a definition of what the term economic literacy might mean we hope that discussion has been broadened and coherence enhanced.

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APPENDIX

Examples of Economics Reasoning: Application of the Procedural Framework

The following examples are intended to illustrate the procedural framework described in the text. Examples of teaching approaches and student resources are illustrated elsewhere in the work of the Economics Education 14-16 Project and the 17+ Working Party of the Economics Association.

Transport: The Procedural Framework

* Take any marginal decision to use a car to travel to work

* Deduce that satisfaction is greater than or equal to money costs (information, skill and conceptual input - cost of petrol, parking etc.)

* Are any other costs involved?

* Use opportunity cost analysis to explore the effects of congestion (Information, skill and conceptual input - the importance of transport to industry etc.)

* Take into account the presence of external/social costs such as pollution

* Is satisfaction equal to real cost at the margin?

* If not, what are the policy implications? Is public transport a desirable and/or feasible alternative to cars?

Example 1: Economics reasoning at 14-18

The Economics Education 14-16 Project based at Manchester University has developed a unit entitled Journey to Work which uses a video programme as initial stimulus for a pupil exercise related to changes in choice of mode

of transport, the economic implications of such changes and possible measures to alleviate some of the problems posed by change.

Example 2: Economics analysis at A level

The following plan contained in Jeffreys (1984) also illustrates the use of the same procedural framework.

> Ask your students to imagine that they work in the centre of a medium-sized city like Bristol or Cardiff, both cities where public transport is available but limited. Inform them that they live in a suburb three miles from their work and that they own a car. Proceed by asking how many of them would choose to travel to and from work by car. Assuming that some answered in the affirmative, ask them to consider what they are giving up as a direct or indirect consequence of their decision. A standard list will follow which should include the goods and services that could be purchased with the difference between bus fares and car travel.
>
> Now move on to the benefits of car travel. With prompting, these should include greater comfort, more flexibility and perhaps more time. Once this point has been reached you are in a good position to point out that each student has two opportunities. Each opportunity carries benefits and costs. In general the benefits of one option are the costs of choosing its alternative. We now have the nature of the problem in place but we are yet to establish its means of solution. Establishing the means of solution will entail the explanation of an important relationship. The individual faces costs which affect his or her evaluation of the best use of personal resources; at the same time an individual's use of a resource carries implications for the way in which society uses its resources. Evaluating the opportunity costs re requires the student to answer two questions: Is the individual's use of his or her own resources an efficient usage, given all the alternatives? Does the individual's use of resources represent an efficient use of society's resources?
>
> We have now extended the analysis to the point where the student has to think of an effective way of measuring the consequenses of the different

options. Again, students can be asked to suggest ways of approaching the question. With luck and some help they might arrive at the point where they have two options: (a) we can measure the total costs and benefits of travelling by car and compare these with the total costs and benefits of travelling by bus; (b) we can compare the costs and benefits of taking an additional journey by car as opposed to an additional journey by bus.

This is where the really hard work takes place because it is necessary to convince your audience that the first option is unworkable - or at least less valuable when compared to the second. The best approach seems to be to ask them what they think they are measuring. In the case of costs this should be straightforward. Costs are the prices of bus or car travel over three miles or the alternative goods and services that could be purchased with the money equivalent of those prices. Benefits will be expressed in terms of less tangible items. Now ask if it makes sense to think of swapping <u>all</u> of the benefits of car travel for <u>all</u> of the benefits of bus travel plus the additional goods and services they could purchase. Or whether it makes sense to think in terms of swapping all of the benefits of motorised transport for the goods and services that could be obtained as a result of walking. Raise the possibility of buying a cycle.

The purpose of this part of the exercise is to convince your audience that the measure of total costs and benefits is too passive. Just because the ratio of the total benefits of car travel to its costs gives a better result than the ratio of the total benefits of bus travel to its costs does not mean that any individual car journey will yield more benefits than any individual bus journey. Total benefits are a 'bygones' measure. Marginal benefits relate to the current choice. This point could be reinforced by asking how many would prefer bus travel on a wet Friday after a hard week, along the main road into town which has experienced roadworks.

If all this fails you may turn to the most powerful argument. The disadvantage of employing this argument is that students find it very difficult. The important aspect of a choice is to determine the direction of change in terms of the effects of previous choices. If the total benefit of car travel exceeds that of bus travel it remains

possible that the last bus journey yielded much more benefit than the last car journey. In which case it is possible that the incremental benefit of journey x is less than the incremental benefit of x-1 in the case of cars whilst the reverse is true for bus journeys.

We have now manufactured all the links of the chain. The final task is to forge the links together. This is done through specifying the role of money values. Introducing costs in this way takes us back to the distinction between the use an individual makes of resources in terms of personal criteria of efficiency and the use which an individual makes of resources in terms of social criteria of efficiency.

At this point a practical task will help. How do we relate the benefits of two options, given that they may have different costs? Give an example of two goods with different prices. Accompany this with two different utility values. Ask your audience what they are buying with their money. Once you have arrived at the point where they say 'satisfaction' you are in a position to say how many units of satisfaction can be purchased with each penny spent on each good. The students can now be offered a simple model to guide their choice of transport. The model is, of course, contained in the equation $MUA/PA = MUB/PB$.

This simple model will do for personal criteria of efficiency, and there are many examples that can be used to demonstrate the absurdity of any course of action other than that prescribed by the equilibrium condition for utility maximization. However, we still have issues of social cost and the criteria that permit an individual's choices to represent an efficient social use of resources. At this point students could be asked to consider what costs are concerned by the price of private transport. They can be helped to think about this by using a diagram which represents a paradigm of the assistance which the economics of social policy offers economics educators.

'Marginal costs of road transport' represents a common problem faced by economists trying to establish appropriate road taxes or train fares. Over a range of journeys the marginal cost of additional journeys is low and constant. At some point an additional driver - or bus commuter - decides to make a journey. This journey represents the 'capacity

journey' and if it is made, either in a traffic jam or a further bus is needed. Whichever of these cases applies, the marginal cost of journeys increases dramatically. If Joe makes his journey the cost of travelling increases to all from x to y. In short, Joe's journey carries externalities. The question should be presented to students at this point is 'Who pays?'. They should be reminded that we have been at pains to persuade our individual consumer to equate benefits to costs. Should we now apply the rule with equal strictness, only in reverse: 'costs must be equated to benefits'? If so, do we inform the beneficiary of the extra journey that he or she faces the entire bill for this morning's jam on the North Circular? Few drivers would opt for this draconian option, primarily because their chances of receiving the bill are similar to other road users. Instead, society chooses to spread the social costs of intense road use through a road tax which is applied to vehicles rather than journey miles. The final stage in connecting links is to consider whether a road tax successfully relates the social costs of private motor transport to its social benefits. At this stage it will be very important to prompt alternatives, such as including a road tax element in petrol sales.

Example 3: Economics analysis in general

The following is the text of a Guardian editorial in January 1984. It provides a general example of the use of the procedural framework.

Some London ups and downs

Mr Ken Livingstone's rate cut for Londoners is due in large part to the success of London Transport's 25 per cent fare reduction in May last year. Odd? LT and the GLC had budgeted for a revenue loss of £100 million, but it turned out to be £23 million less. The number of Underground rail journeys, for example, increased last year by an estimated 12½ per cent, instead of the predicted 7½ per cent. This increase is all the more impressive because both London's population and London's jobs have been declining, and because the latest journey figures for BR's Southern commuter services, where there was no equivalent fare cut, show a fall of 3½ per cent. Survey evidence suggests that London Transport's "Just the Ticket" scheme helped turn around the increase in cars entering London each day, so that the number dropped by 9 per cent to 180,000 last year. If one of the GLC's objectives was to cut congestion, it has succeeded.

None of this, of course, will console those Conservatives who believe it a mortal sin to subsidise anything. For them, the GLC's fare cut is a distortion of what the free market tells us that commuters want: which is to travel by car. This argument, though, fails to take account of very sound economic arguments to show that the free market in urban transport does not reflect consumer preferences. We have this on no less an authority than Professor Alan Walters, recently the Prime Minister's adviser, whose textbook "Micro-Economic Theory" (co-written with Richard Layard, McGraw Hill 1978) points out that "The individual will decide on the basis of his own costs whether or not to make the trip, but his own costs do not include the additional congestion cost he imposes on others, and so too many motorists use the road." Congestion costs time, frustration and pollution.

Another point? a high proportion of the cost of buses and tubes is fixed: however few people travel, you still have to pay the driver. Thus the extra cost of an extra passenger, especially off peak, is minimal. It makes sense to encourage people to use the service. So economic theory suggests that public authorities should tax city centre cars, as Singapore does, and/or heavily subsidise their competition as Paris, New York and others do. (Indeed, an OECD survey in 1975 found that Britain's average urban transport subsidies were the lowest of all developed countries save Finland, Greece, Ireland and Spain.) What happens if you do not intervene in this particular market is the nightmare that many western cities experienced in the sixties: higher real incomes encouraged car use, which meant that public journeys fell, which meant that losses rose disproportionately because of fixed costs, which meant that fares rocketed, which meant still fewer public journeys, which meant jams of frustrated motorists all glorying in their fundamental freedom of choice.

The GLC, though, can be faulted on its London Transport policy. It is not doing enough to improve bus and tube services or to ensure that costs are held down. Most London buses and trains still have a driver plus an unnecessary conductor or guard. There must be more than a sneaking suspicion that public subsidies are not just going to reduce fares, but to mollycoddle restrictive practices and snoozing maintenance men. Nevertheless, the sort of productivity increase in London Transport which is feasible could not possibly allow it to stand on its own unsubsidised feet without re-starting the vicious circle of higher fares and fewer journeys. For too long the debate about urban transport in Britain has been between right wingers who are ill-informed about the economic arguments, and left wingers who sell themselves short both by condoning inefficiency and by justifying subsidy merely on the grounds that 41 per cent of households do not have a car. City-dwellers please note: public fare subsidies benefit us all.

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Health: The Procedural Framework

* Take the decision to smoke one cigarette

* Deduce that satisfaction is greater than or equal to money costs (Information, skill and conceptual input - costs of cigarettes, indirect taxation, trade, etc.)

* What other costs must the smoker bear? What other resource use is implied?

* Use opportunity cost analysis to explore the effects of smoking on health (Information, skill and conceptual input - the factors affecting health, health as a stock)

* Take into account the effect on the demand for health care. Is satisfaction equal to real costs at the margin?

* If not, what are the policy implications? Why is smoking not banned?

Example 1: Economics reasoning at 14-18

The Economics Education 14-16 Project based at Manchester University has developed a unit entitled Whose Health is it Anyway? which explores the difference between the demand for health and the demand for medical care. An analogy between the body's health and a car is exploited in order to provide a context in which pupils can operate. They are encouraged to use economic analysis to reveal the true nature of an individual's and a nation's health choices.

Example 2: Economics analysis at A Level

Chapter Nine in Gowland (1983) by Professor Alan Williams, entitled The Economics of Health, Professor Alan Maynard's article entitled Privatizing the National Health Service in the April 1983 issue of the Lloyds Bank Review and Chapter Forty-three in Whitehead (1979) by John Rees, entitled Social and Environmental Economics illustrate the application of the same procedural framework to an analysis of various health issues.

Example 3: Economics analysis in general

The following is the text of an Observer feature article by Katherine Whitehorn. It provides a general example of the procedural framework at work.

WHOSE HEALTH IS IT ANYWAY?

The annual agony of getting rid of a few of the books that stand around in heaps on the floor has just been completed; and I'm interested to see that most of the ones I think I can do without are all books urging me to improve my health.

I suppose I must admit, grudgingly, that I have nothing against health as such. But I do find myself locking horns more and more often with a beast that is rapidly turning into a sacred cow: the need for preventative medicine. The argument generally goes like this. We spend a lot on health (though not, as a matter of fact, as much as most developed countries: France and Japan spend three times as much on medicines as we do, and Switzerland, in spite of all that clean air and belting up and down mountains, four times); we have a lot of advanced technical devices for curing people; would it not be better to stop them getting sick in the first place?

The telling analogy is between doctors and people mopping a floor: they are good at it, they've been trained for it; they are some of the best floor-moppers in the world; but they've no idea how to turn off the tap that's causing the flood. Doctors and medical planners are currently being urged to think out ways of saving money by preventing illness.

My first, perhaps minor, objection is that the cost statistics are phoney. Lung cancer, heart disease, accidents, the number of man-hours lost every year from low back pain - what it all costs can easily make your hair stand on end. But what no one can assess is what the cost would be if you hadn't crashed the bike, died of lung cancer or suffered the fatal heart attack - if you live on, to that which should accompany old age, as strokes, arthritis, hip replacement and a good 10 years in a geriatric home.

The young should not, of course, roar around on motor bikes and I have worn my knees to the bone praying my own to stay off them. But if six young tearaways crash their bikes and two of them die, the sum of what the survivors cost to repair, what the dead ones might or might not have contributed to the economy or taken out of it later is simply impossible to calculate.

Nor do you know, for that matter, what they might have been up to if not riding the bikes - for all I know the young bloods might have bashed in even more old ladies and started yet further riots if they'd been made to ride three-speed pushbikes or condemned to go slowly mad waiting for the 31 bus.

And as for the hours lost from illness - what do they mean, working hours? The ones spent sitting around waiting for the wood to arrive? The ones employed typing out the memo more cleanly or rearranging the boss's flowers? The great embarrassment of the three-day week in 1973 was that it proved how many people could actually get their work done perfectly well in three-fifths of the usual time. The idea that if you have four weeks off work the nation has actually lost 160 hours of production is absurd.

Since people will die of something sooner or later, and it may be that the later they do it, the more it costs, the notion that problems of health financing are to be solved by preventing illness is moonshine. But that's not the heart of it.

If you take your body to the doctor, it is like taking a car to the garage: you say, there's a terrible knocking under the bonnet, could you do something about it? Either he can or he can't - and of course, he may tell you to stop driving with so little oil (if a garage) or so much alcohol (if a doctor). The point is that you, the patient, have asked him to do something about your physical state. And insofar as prevention means simply anticipating a physical ailment and stopping it before it has got started - with things like vaccination or inoculating you against diphtheria or malaria - I'm all for it.

But the current urge is towards a prevention of illness which involves the life-style, and therefore brings in all sorts of psychological, political and philosophical considerations; and these are, I submit, our own business. A woman might indeed be healthier if she never touched the demon drink - or she might find her six squaling children and three resident great-uncles totally insupportable; the decision should be hers.

High blood pressure is controllable by an altered life-style and a regime of pill-taking (among other things), but a young man has surely the right not to turn himself into a young hypochondriac for fear of what might happen when he's fifty. Dentists keep telling you you'd have much better teeth if you cleaned them five times a day; but I might decide I was not put into this world to spend my entire time brushing my teeth.

Don't get me wrong; I am all in favour of any action, by government or anyone else, that stops anyone making other people ill - illnesses caused by putting them to work with dry asbestos, or allowing lead to pour out of cars into homes along the highway, or tipping industrial waste into the water, or advertising simple people out of roughage and breast milk on to high-priced industrial substitutes. But I never elected anyone to the right to make me healthy myself; or the moral right to make me feel that my unhealthy habits are a sin against the religion of medicine.

I do not quite vote the straight Ivan Illych ticket, that preventive medicine is just an evil attempt to turn such few citizens as are not paying money to doctors into patients in some sense all the same. But I think the right to decide about my health is mine. If I burn my candle at both ends, it may not last the night; 'but oh, my foes, and oh, my friends - it gives a lovely light.'

KATHARINE WHITEHORN

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